



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,213	08/17/2001	William Webb	PALM.P863	5012
30554                      7590                      07/09/2008 SHEMWELL MAHAMED I LLP 4880 STEVENS CREEK BOULEVARD SUITE 201 SAN JOSE, CA 95129				
EXAMINER				
CHANG, KENT WU				
ART UNIT		PAPER NUMBER		
2629				
MAIL DATE		DELIVERY MODE		
07/09/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

## Application No.

09/932,213

## Applicant(s)

WEBB ET AL.

## Examiner

Kent Chang

## Art Unit

2629

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 6-40 and 45-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6-40 and 45-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 4/7/08

## DETAILED ACTION

### *Information Disclosure Statement*

1. The references listed in the Information Disclosure Statement submitted 10/31/07 have been considered by the examiner (see attached PTO-1449).

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. Claims 1, 2, 6-40, 45-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boesen (US Patent No. 5,542,721) in view of Lee (US Patent No. 6,243,595) and Tomura et al. (US Patent No. 6,771,992).

Boesen discloses a mobile device having a first segment; a second segment with a first input feature (keypad section 22) moveably coupled to the first segment to move between a contracted position having a reduced length (as shown in Fig.9) and an extended position having a maximum length (as shown in Fig.7) along one axis; a display assembly provided by the first segment, wherein the portion of the display assembly is accessible to contact by a user when the second segment is in the extended position; wherein the second segment overlays the first segment when the second segment is in the contracted position so as to reduce a length of the mobile device as recited in claims 1, 19-21, 27-29, 41, 45-50 (see column 5 lines 23-40 and Figure 7). Obviously, the portion of the first segment being overlaid by the second segment could have varied from none to full length dependent on user's choice, a longer overlaid portion would have lead to a smaller size of the device, while a shorter overlaid portion would have provided more input functions to the user. Furthermore, Boesen includes a pivotable mechanism to allow the user to adjust the angle between the first segment and second segment. However, this function is only for enabling the user to use the device in a manner as a phone handset, and the pivoting operation is performed after the sliding operation, wherein the pivotable mechanism is operative independently from the operation of the sliding operation. It would have been obvious for one ordinary skill in the art at the time of the invention to operate the device without the pivoting motion since it merely depends on the user's preference on the angle and length of the device. Boesen teaches a set of input mechanisms (22) in the second segment, but does not expressly teach a multi-directional input mechanism.

However, in the same field of endeavor, Lee teaches a mobile device comprising a first segment having a display, a second segment slidable between a contracted position to cover a portion of the display in the first segment and an extended position, wherein the second segment further comprises a set of input mechanism including a multi-directional input mechanism (elements 8.16-8.19, see figure 3).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to use a multi-directional input mechanism as taught by Lee in the device of Boesen so as to enable easy cursor movement control as well known in the art. It's also well known in the art that such a multi-directional input mechanism can be used to input data for selection of a displayed menu item, a data entry, or an application.

Furthermore, Tomura et al. teach a multi-directional key having a plurality of directional actuation states (X and Y) and a center actuation state (Z) (column 8 line 7 to column 9 line 13 and Fig.7).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the multi-directional input mechanism in the device of Boesen as modified by Lee as the one taught by Tomura so as to further increase the functionality of the multi-directional input mechanism as suggested by Tomura.

Consider claims 2 and 23. It would have been obvious for one of ordinary skill in the art at the time of the invention to replace the touch screen 38 with a small touch screen and a touch pad so as reduce manufacturing cost of the device. However, such a modification would have resulted to a touch screen with a small size.

Consider claim 22. The device of Boesen includes character recognition (column 4 lines 53-57).

Consider claims 6-7. Boesen further teaches to provide additional function buttons or other inputs (column 3 lines 51-55). Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to modify Boesen's device to include other known input functions such as multi-directional member, touch pad as suggested by Boesen so as to provide the user additional input functions.

The device of Boesen includes a front shell (portion of 4), a midframe (portion of 38), a bottom shell (portion of 24), a first rail and a second rail, a first connecting member and a second connecting member to enable the second segment slide to the first segment (see figures 6 and 7). It would have been obvious for one of ordinary skill in the art at the time of the invention to housing the rails and connecting members in two side surface, the back surface, or other places of the mobile device since the device would function equally well with the rails and connecting members locating in any places (as recited in claims 8-18, 24-26, 30-37, 40). Furthermore, it would have been obvious for one of ordinary skill in the art at the time of the invention to use additional rails (as recited in claim 38-39) in the device of Boesen so as to enable easy moving of the two segments.

#### **(10) Response to Argument**

Regarding to applicant's arguments with respect to the newly added limitations in the independent claims, note that Tomura teaches a multi-directional key having a

plurality of directional actuation states (X and Y) and a center actuation state (Z) (column 8 line 7 to column 9 line 13 and Fig.7).

As to applicant's arguments with respect to the limitation of

"wherein the housing assembly is structured to expose a reduced section that has a reduced peripheral thickness when the housing assembly is in the extended position."

note that the thickness of segment 38 is smaller than segment 2 in the device of Boesen while the housing assembly is in the extended position.

The remainder of the pertinent topics for argument are present in the appropriate rejections above.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Miyakawa (US 4,931,781).
5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***CONTACT INFORMATION***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kent Chang whose telephone number is 571-272-7667. The examiner can normally be reached on Monday to Thursday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz, can be reached at 571-272-3638.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

**571-273-8300**

Hand-delivered responses should be brought to the Customer Service Window, now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314.



Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Kent Chang/  
Primary Examiner, Art Unit 2629

Kc

7/1/08